

REMARKS

Applicants thank the examiner for indicating that claims 5, 6, 8, 10, and 11 contain allowable subject matter. Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

A statement of continuity of the application has been added to the specification. Claims 1-18 remain pending in the application and are presented for reconsideration.

A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Amendments to the Specification

In the Office Action, the Examiner objected to the specification for not including a statement of the continuity of the application. In response, the specification has been amended to include a statement of continuity of the application. Accordingly, Applicants respectfully request that the objection be withdrawn.

Claim Rejections under 35 U.S.C. § 103

Claims 1-4, 7, 9 and 12-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,449,394 (“Florencio”). The rejection is respectfully traversed below and the Applicants submit that claims 1-4, 7, 9 and 12-18 are allowable for at least the following reasons.

Applicants rely on M.P.E.P. § 2143, which states that to establish a prima facie case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation in the prior art to modify the reference. Second, there must be a reasonable expectation of success. Third, the prior art must teach or suggest all the claim limitations.

Applicants respectfully submit that Florencio does not disclose, teach or suggest each and every element of independent claims 1, 16 and 17. Claims 1, 16 and 17 are directed to a

digital data compression method and a digital data compression encoder. The claimed invention uses two parallel data flows as input. As claimed in claim 1, the encoder includes an input for a first data flow and a second data flow. An encoding module is used to match symbols of the first data flow to code words. Redundant code words exists for certain symbols of the first data flow. As claimed in independent claims 16 and 17, the digital data compression method establishes “a match between symbols of the first data flow and code words, wherein, for certain symbols, there exist several words, termed redundant, corresponding to the same symbol.”

A processing module is used for encoding the symbols of the first data flow. During encoding, the encoder can choose from several options with which to encode symbols in the first data flow due to the code word redundancy. According to independent claims 16 and 17, the digital data compression method encodes “the symbols of a first data flow based on the match” between symbols of the first data flow and code words, “by selecting among the redundant words, on the basis of at least part of a second data flow.” Thus, the processing module determines which redundant code words to use for encoding the first data flow based in least in part on the second data flow. The existence of these two data flows, together with their claimed interaction, provides for both error resilience and an efficient data compression scheme.

In contrast, Florencio does not disclose, teach or suggest each and every element of independent claims 1, 16 and 17. Florencio discloses a method for encoding symbols having variable-length code bits by using fixed-length code bits. The fixed-length code bits include redundant bits that may be used in other variable-length code bits to encode other symbols. However, Florencio does not disclose “an input for a first data flow (S_H), and a second data flow (S_L)” as claimed in claim 1. Instead, Florencio encodes a single set of data (made up of a series of symbols). (See Col. 3, lines 50-51.) Further, Florencio does not disclose a processing module and a method for “encoding the symbols of the first data flow based on the match, by selecting among the redundant words, on the basis of at least part of the second data flow” as claimed in claims 1, 16 and 17. In the alternative, Florencio discloses that for a given symbol sequence (representing encoded data), the first symbols are partially encoded

using redundant bits. Then, a subsequent symbol is encoded using only the redundant bits. (See Col. 4, lines 26-34.)

In the Office Action, the Examiner, referring to Florencio, asserts that “[t]he ‘first data flow’ is the earlier appearing symbols in the stream and the ‘second data flow’ is the subsequently appearing symbols.” (See Office Action at p. 2.) Applicants disagree. Florencio is clearly directed to encoding a single data sequence or flow, wherein the data sequence is made up of one or more signals. (See Col. 4, lines 27-31.) Florencio does not suggest using a second data flow in parallel with a first data flow as claimed in claims 1, 16 and 17. Instead, Florencio discloses a method of assigning symbols corresponding to data acquired from a single data flow until enough redundancy exists to code the last acquired datum with redundant bits. The first and second flows that the Examiner asserts exist in Florencio are simply two parts of one data sequence. In fact, what the Examiner considers as “the second data flow” is actually derived from and defined by the “first data flow.” Thus, Florencio does not disclose first and second input data flows as claimed in claims 1, 16 and 17.

Furthermore, assuming *arguendo* that the Examiner’s assertion regarding the first and second data flow is correct, the encoding method of Florencio still does not disclose every element of the claimed invention. Specifically, claim 1 recites “encoding the symbols of the first data flow based on the match, by selecting among the redundant words, on the basis of at least part of the second data flow.” In contrast, Florencio teaches that the subsequently appearing signals (the second data flow) are encoded with redundant bits that are determined based on the earlier appearing symbols (the first data flow). Accordingly, under the Examiner’s assumption, the present invention is still patentable over Florencio because Florencio does not disclose a method for encoding the earlier appearing symbols based on the subsequently appearing symbols.

Therefore, for the reasons set forth above, Applicants respectfully request that the rejection be withdrawn and independent claims 1, 16 and 17 be allowed. In addition, claims 3-4, 7, 9 and 12-18 depend from one of claims 1 and 16 and should be allowed for the reasons set forth above without regard to the additional patentable limitations therein. Accordingly,

Applicants respectfully request reconsideration of claims 3-4, 7, 9 and 12-18 and that the rejection be withdrawn.

Conclusion

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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